

## WEST Search History

DATE: Tuesday, March 28, 2006

Hide?	Set Name	Query	Hit Count
	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>		
<input type="checkbox"/>	L37	6730939	3
<input type="checkbox"/>	L36	4608117	38
<input type="checkbox"/>	L35	L34 and l32	59
<input type="checkbox"/>	L34	gate or wire or pixel or drain	3365571
<input type="checkbox"/>	L33	L32 and l1	0
<input type="checkbox"/>	L32	L31 same l13	172
<input type="checkbox"/>	L31	l5 same l11	648
	<i>DB=JPAB; PLUR=YES; OP=OR</i>		
<input type="checkbox"/>	L30	l29 and l28	0
<input type="checkbox"/>	L29	currentless	9
<input type="checkbox"/>	L28	l17	12
<input type="checkbox"/>	L27	l16	0
<input type="checkbox"/>	L26	l16 and l17 and l18	0
<input type="checkbox"/>	L25	57-043977.pn.	0
<input type="checkbox"/>	L24	57-43977	0
<input type="checkbox"/>	L23	570043977	0
<input type="checkbox"/>	L22	57043977.pn.	0
	<i>DB=PGPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>		
<input type="checkbox"/>	L21	l20 and l11	4
<input type="checkbox"/>	L20	l13 and l19	8
<input type="checkbox"/>	L19	L18 and l17 and l16	29
<input type="checkbox"/>	L18	wolf.inv.	22605
<input type="checkbox"/>	L17	giesecke.inv.	278
<input type="checkbox"/>	L16	ebneth.inv.	125
<input type="checkbox"/>	L15	L14 and l1	11
<input type="checkbox"/>	L14	L13 same l5	3123
<input type="checkbox"/>	L13	light or irradiat\$5	3268036
<input type="checkbox"/>	L12	L11 and l10	6
<input type="checkbox"/>	L11	pattern	1707313
<input type="checkbox"/>	L10	L9 and l6	38
<input type="checkbox"/>	L9	palladium and dichloride	9860

<input type="checkbox"/>	L8	palladiaum and dichloride	0
<input type="checkbox"/>	L7	palladium and dichlorideL6	0
<input type="checkbox"/>	L6	L5 and l1	981
<input type="checkbox"/>	L5	organometal\$5	58503
<input type="checkbox"/>	L4	L3 and l1	24799
<input type="checkbox"/>	L3	metal\$5 or organ\$5	5106626
<input type="checkbox"/>	L2	metal\$5 or organ\$5L1	4050784
<input type="checkbox"/>	L1	bayer.asn.	63975

END OF SEARCH HISTORY

[First Hit](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

Generate Collection

Print

L29: Entry 4 of 9

File: JPAB

Mar 10, 1998

PUB-NO: JP410070128A

DOCUMENT-IDENTIFIER: JP 10070128 A

TITLE: METHOD OF FORMATION OF PALLADIUM CONTACT BUMP ON SEMICONDUCTOR CIRCUIT CARRIER

PUBN-DATE: March 10, 1998

## INVENTOR-INFORMATION:

NAME

COUNTRY

MEYER, HEINRICH DR DR

MAHLKOW, HARTMUT

ASCHENBRENNER, ROLF

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

ATOTECH DEUTSCHE GMBH

FRAUNHOFER GES

APPL-NO: JP09196019

APPL-DATE: July 22, 1997

INT-CL (IPC): H01 L 21/321

## ABSTRACT:

PROBLEM TO BE SOLVED: To deposit a uniformly thick palladium contact bump on a conductor by a method wherein, after an aluminum conductor has been treated by an activating solution containing acidic palladium ions, a neutral currentless palladium deposition bath, containing formic acid or formic acid delivative, palladium ions and a nitrogen containing a complexing agent, is used.

SOLUTION: A metal intermediate layer 5 is selectively deposited on the surface of a cleaned aluminum conductive layer 1 using a zing ion aqueous solution. Also, the surface of a silicon base 4, which is not covered by an aluminum bonded pad 1, is covered by a passivated layer 3. Subsequently, a thin palladium layer 6 is formed on the aluminum bonded pad 1. After the palladium layer 6 has been activated by a strong acidic solution containing perchloric acid potassium (oxidizing agent) and sulfuric acid palladium, a contact bump 7 is deposited on the palladium layer using a non-current palladium bath (pH value of 4 to 7) containing ehtylenediamine (complexing agent) and sodium formate (reducing agent). The temperature of above-mentioned bath is about 70°C, and the deposition thickness is corresponded to treatment time.

COPYRIGHT: (C)1998,JPO

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

[First Hit](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

Generate Collection

Print

L35: Entry 57 of 59

File: DWPI

Aug 11, 2005

DERWENT-ACC-NO: 2005-566813

DERWENT-WEEK: 200558

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Precipitation of metal and/or metal oxide for pattern formation, involves irradiating film containing organometallic compound and/or complex with energy beam, and decomposing organic component in film at irradiated region

INVENTOR: HIYAMA, H; SUMIYA, M ; YOKOTA, H

PATENT-ASSIGNEE: EBARA CORP (EBAR)

PRIORITY-DATA: 2004JP-0020856 (January 29, 2004)

Search Selected

Search ALL

Clear

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> JP 2005213567 A	August 11, 2005		017	C23C018/14

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP2005213567A	January 29, 2004	2004JP-0020856	

INT-CL (IPC): B82 B 3/00; C01 B 31/02; C23 C 18/14; H01 J 1/304; H01 J 9/02

ABSTRACTED-PUB-NO: JP2005213567A

## BASIC-ABSTRACT:

NOVELTY - A film containing an organometallic compound and/or an organometallic complex, is formed and irradiated with an energy beam. The organic component contained in the film positioned at the irradiated region is decomposed, and a metal and/or a metal oxide are precipitated.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) particles of metal and/or metal oxide produced by the process;
- (2) film of metal and/or metal oxide;
- (3) wire of metal and/or metal oxide;
- (4) metallic mold of metal and/or metal oxide;
- (5) semiconductor device;

(6) manufacture of carbon fiber or carbon tube, which involves forming particles of metal and/or metal oxide on a substrate, contacting the substrate with hydrocarbon gas and/or carbon-monoxide gas, heating the substrate, and forming carbon fiber or carbon tube on the particles;

(7) manufacture of optical waveguide, which involves forming a pattern of particles of metal and/or metal oxide on a substrate at equal spacing;

(8) manufacture of single electron transistor, which involves using the particles of metal and/or metal oxide as a conductor island;

(9) manufacture of field emitter, which involves using the particles as an emitter tip;

(10) optical waveguide;

(11) single electron transistor;

(12) field emitter; and

(13) pattern forming apparatus (10) of metal and/or metal oxide, equipped with a unit (14) for forming a film of organometallic compound and/or complex, and a unit (18) for irradiating with an energy beam.

USE - For precipitating metal and/or metal oxide in form of particles, films, wires and metallic molds, used for pattern formation in manufacture of semiconductor device, carbon fiber or carbon tube, optical waveguide, single electron transistor, field emitter (all claimed), and other functional materials, such as electric, magnetic and light functional materials used for nano-size catalysts.

ADVANTAGE - The precipitation method enables easy and convenient pattern formation.

DESCRIPTION OF DRAWING(S) - The figure shows the pattern forming apparatus.  
(Drawing includes non-English language text).

pattern forming apparatus 10

wafer delivery opening 12

film-forming unit 14

irradiation unit 18

washing-drying unit 20

ABSTRACTED-PUB-NO: JP2005213567A  
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.4/10

DERWENT-CLASS: E36 L03 Q68 U11 V05 X25

CPI-CODES: E05-B03; E05-D; E05-F02B; E05-L; E05-M01; E05-M02A; E05-M02C; E05-M03A; E05-M03B; E05-N02C; E05-N03B; E05-U03; E05-V03; E11-A; E31-N01; E31-P03; E34-C01; E35; L03-G02; L04-C06; L04-E01; N01-C02; N01-D02; N02-A01; N02-B01; N02-C01; N02-D01; N02-E01; N02-E03; N02-E04; N02-F; N03-B; N03-C01; N03-C03; N03-D01; N03-E;

N03-F; N03-G; N07-J;

EPI-CODES: U11-C05B4; U11-C05C6; V05-F05A7A; V05-F05A7C; V05-F05A7X; V05-F05E5;

V05-F08D1; X25-A09;

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)